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Original Communications.

On Tuberculosis and its Treatment.

No. 8.

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4. *Light*.—Light is a very important condition of life, though apparently not so essential thereto as heat. Nevertheless, its influence is very potential in promoting life action; and besides, as it is analogous to, and correlative with heat, it is hence more or less necessary to the existence and development of the vital economy. The influence of light has, however, been considered too exclusively limited to the lower forms of life, the vegetable especially, while in reality it is highly essential to the existence and development of animal as well as of vegetable life. Its influence is, therefore, not limited to plants alone, but extends also to animals, man inclusive. This influence is especially exerted in promoting the organic or vegetative processes, and is thus strikingly manifested in the growth and development of both plants and animals. Its power in thus promoting the vegetative functions of both plants and animals is very great, and often strongly marked.

Still, this power is not exclusively limited to the promotion of the organic functions, or the vegetative life of animals alone, but is also more or less active in promoting those of the animal life, or the life of relation. This is constantly exhibited in the influence which it exerts in augmenting the sensibility, impressibility and irritability of the special senses and general nervous system, and increasing the excitability and ac-

tivity of the muscular organs. The influence of light upon the animal economy does not, however, stop here, as it is, moreover, still further operative in exciting the functions of the cerebrum, and is thus active in promoting the higher and more exalted processes of psychical life. While, therefore, light is very active in promoting the functions of organic or vegetative life, it also exerts more or less power over those of both the animal and psychical life.

That light does thus exert a powerful influence over the various functions of the animal economy may be made more clearly manifest by a more particular notice of some of the phenomena to which it gives rise. Thus, for instance, it enables the organic or vegetative life to exert sufficient chemical power to convert inorganic matter into organic compounds for organic purposes. Plants are thus enabled to take up, decompose, recombine, and finally appropriate various simple and compound substances, both inorganic and organic. Light is hence especially useful in causing the plant to decompose carbonic acid, water, and ammonia, and to re-arrange their constituent elements, or combine their components in such manner as to form other and more complex bodies. In this way the plant is enabled to generate organic compounds out of simple or complex substances, and thus to prepare and supply the necessary pabulum for the more immediate as well as ultimate purposes of life.

This chemical influence of light appears to be more energetically exerted on plants than on animals, because, in the first place, they are the more immediate agents for the preparation of organic matter out of the crude elements; and, in the second place, the material employed

for alimentary purposes by the latter is usually in a state more nearly approximate to that of their own structure. Though correct in the main, this is not, however, absolutely the case in all instances, as much matter, both simple and compound, inorganic and of a low grade of organization, is introduced, combined, and transformed within the animal economy, prior to its more specific and ultimate metamorphosis and final assimilation. But besides these preliminary changes incidental to the construction of the organic pabulum for nutritive purposes, active chemical metamorphosis takes place in the retrogressive processes, for the perfection of which it is more than probable that light is highly essential.

The influence of light is, however, not only operative in thus modifying matter, but it is also active in promoting the development of living forms, both vegetable and animal. This is apparent to common observation, though it has also been demonstrated experimentally. Thus, for instance, it is strikingly exhibited in the rapid growth and extreme development of the flora and fauna of the tropics, (where light is most intense and abundant,) and the relative difference between them and those of the arctic regions, though of course this effect is due, in some measure, to the conjoint influence of heat. It is also exhibited in the relative influence of day and night, light and darkness, upon the growth and development of both plants and animals. Moreover, it is still further shown in the partial or complete suspension of organic metamorphosis and development by the more permanent privation of light, a striking illustration of the truth of which is presented in the experiments of Dr. Edwards, in which tadpoles were prevented from undergoing their usual development into frogs by being secluded from the light. Experiment, then, as well as observation, teaches that light is essential to the normal development of both vegetables and animals, and this is as true of the human body as of any other living organism.

The influence of the light in thus promoting chemical metamorphosis and organic development, is hence very extensive and potential.

But, as before intimated, this photogenic influence is not exclusively limited to the organic or vegetative life, as it is also more or less active in promoting the functions of the dynamic apparatus, or those of the animal and psychical life; in proof of which it is only necessary to point to the greater restlessness and activity of the body and mind during those periods of time in which the diurnal as well as annual increase of light takes place in the same spot as well as in different parts of the earth; and conversely, to the inactivity, inertia, and even stupor of the diurnal and annual diminution of light, during the night and those long seasons of darkness in the polar regions. Also, to the marked contrast appreciated by all, between the mental exhilaration and cheerfulness induced by clear, bright weather, and the dullness, gloom, and even despondency, produced by dark and cloudy weather.

Light is, therefore, mainly instrumental in causing chemical combination and decomposition, in generating organic compounds, in promoting nutrition, disintegration and depuration, and in stimulating the dynamic functions of the brain and nervous system. It is thus seen that the influence of light upon the different parts and processes of the human economy, the organic, animal and psychical life inclusive, is very powerful, and indeed of so much importance as to constitute an essential prerequisite for its normal development and healthy status.

The sources of light, or rather the more immediate agents for its development, are somewhat numerous, though the principal and most important is planetary influence, and the planet thus most active is, beyond all question, the sun. Besides this, there are others connected with both the inorganic and organic world. Thus, for instance, mechanical, chemical, organic and dynamical action gives rise to the phenomena of light, with different degrees of intensity and quantity proportionate to the activity of the developing cause. Some of these are more or less under artificial control, and the influence of this artificial light is, in some respects, similar to that of the sun. The

intensity and quantity of solar light varies according to the period of the day and season of the year in different parts of the earth, and in the same place at different periods of time, though doubtless the general average is always more or less uniform. The extremes are well marked, between the day and night, summer and winter, dry and wet seasons, and between the tropical and arctic regions. The relative effects of these different degrees of light upon the animal economy are usually more or less apparent. Thus in general, as before intimated, the difference and connection between the brightness and activity of the day, and the darkness and inertia of the night, are very striking. Moreover, the difference in the relative activity, vigor and development of life between the summer and winter, and the tropics and polar regions, are also well marked. Within itself, therefore, light is a stimulant, while its absence or darkness exerts a sedative influence. All other things being equal, then, these effects are in relative proportion to the degree of intensity and the quantity of light. The relative influence of these respective conditions of light and darkness are exhibited in both health and disease, and it is with a view to their better appreciation in these relations, in order to thus exhibit more positively their special connection with that particular morbid state known as tuberculosis, that we have offered these preliminary remarks.

The vital organism not only appropriates, but also develops light as well as heat. This is apparent in the absorption of light, as well as by its positive development in both plants and animals, man inclusive. This manifestation of light may occur in both health and disease, life and death. The evolution of light in man is however, somewhat rare, and is considered to be almost if not quite always connected with a state of disease, though it would seem that it may also be developed almost at pleasure in a condition of health. Thus it is stated that a stream of light flowing from the body, may be made visible in the dark, by holding the hand near a broad leather belt moving rapidly. It is also asserted that it may be developed by other means. The forms

of disease in man in which light becomes manifest are somewhat different, though they are in the main, of an adynamic type. Thus it has been observed in cancer and phthisis and some other morbid conditions. It has also been seen in connection with the breath, sweat, and urine.

The relation of light to life in general, and to the animal organism in particular is thus seen to be most intimate and important. This relation is however, more complex than the preceding considerations would lead us to infer, as we have hitherto treated of it as an unit, while in reality it is a compound of different influences. Thus analysis has shown that it is composed of photogenic, calorific, actinic, and colorific rays. The influence of light is therefore, multiple instead of simple, although all of these respective and peculiar constituents doubtless act both conjointly and separately. Notwithstanding however, the apparently compound character of light, it is probable that its constituents are but mere modifications of one and the same principle, arising either *ab origo*, or out of its relations with material substances. It is thus seen that light exerts at least a fourfold influence, and it is therefore probable that this influence varies at different periods according to the relative intensity and proportion of its constituents. The respective influence of these several elements of light, is more or less evident, but as we have already partially noticed some of the most active, we shall not again particularly dwell upon them; nor can we go into a minute detail of the others, and hence shall only allude in a very general way to some of their separate and combined effects with a view to their more direct bearing upon the special subject of attention. The powerful influence of the colorific ray in causing the development of color in both plants and animals is well known, and is in fact so familiar that many persons and females especially, regard light with so much dread that they avoid it so carefully as to often suffer greatly in general health from its privation. It is especially useful in giving color to the blood and other parts of the animal organism.

The influence of the actinic ray is also very

powerful in causing chemical changes both in the inorganic and organic world. It is especially active in promoting the chemical modifications and organic metamorphoses so essential to life action, and hence it is a potential agent in the production of the organic compounds for the development of both plants and animals, as well as active in promoting those changes essential to disintegration and depuration.

It is thus shown that light is a very potential agent in promoting the various processes of vegetable and animal life, and that it exercises a powerful influence over the functions of the human economy, either organic, chemical, mechanical, or dynamical, and hence necessarily over the vegetative, animal and psychical life inclusive. This is seen in the potent influence which it exerts in causing the chemical changes essential to the production of the organic compounds for nutritive purposes; in the promotion of the formative and retrogressive metamorphoses; in giving color to the various organic liquids and solids; in aiding depuration; in exciting the senses, and general nervous and muscular system; in stimulating the brain; and, in promoting the healthy development, vigor, and activity of the whole organism. While conversely, it is also exhibited in the fact, that its absence or darkness, retards or entirely suspends development and the various processes of life, and thus diminishes or checks the activity of the organic, chemical mechanical and dynamical functions of the animal economy. Proof of this is afforded in the imperfect or non-development of plants and animals, and of man especially; in the impairment of general nutrition, disintegration, and depuration; in the torpidity of the brain and nervous system; and, in the consequent inactivity of the body, dulness of the senses, inertia and even gloominess of the mind, with more or less stupidity and disposition to sleep. The stimulant influence of light, and the sedative influence of darkness is in fact so well known that it has given rise to the common practice of excluding the light in the treatment of various forms of disease, those of the brain and nervous system especially, to thus diminish excitement, allay

irritation, induce composure and quietude, and promote sleep.*

Sufficient evidence has thus been presented to prove that light exerts a powerful influence over the vital economy, and that its presence is essential to its perfect development and healthy condition; and moreover, that this is as true of the human as any other organism. While on the other hand, it has also been shown that its absence is a frequent and potential cause of imperfect or mal-development, inertia, and derangement. These derangements are of divers kinds both physical and psychical, and are frequently exhibited in the form of the various cachexias and their concomitants. An insufficiency of light is therefore, an active cause of disease, and more especially of those forms of atrophy and adynamia, connected with anæmia, rickets, scrofulosis, tuberculosis, and similar affections. Its ætiological relation with tuberculosis is well known, though too often overlooked or totally disregarded. Darkness or the privation of light is indeed a potential cause of this disease in both man and the lower animals, and it is necessarily very active in increasing its intensity when it already exists. Hence all other things being equal, those who are deprived of the vitalizing and beneficent influence of solar light are most frequently and severely affected with phthisis. This is not only true of man, but also of other members of the animal kingdom, hence the prevalence and activity of this disease in rabbits, cats, parrots, pigeons, monkeys, and other animals when obliged to live an artificial life which excludes them from the light. This is exempli-

*This knowledge affords a hint which might prove of much practical advantage in the treatment of many diseases, both general and local, in which a stimulant influence is required. Thus persons with purely adynamic states of the eye, brain, nervous, muscular and general system, as amaurosis, idiocy, dementia, paralysis, anæmia, inanition, and other atonic conditions, might probably be much benefited or even restored to health by a free and prolonged exposure to light. Indeed the practical value of such a course has already been demonstrated to a certain extent. This measure alone or in conjunction with other rational treatment is therefore, worthy of a more extended, careful, and systematic trial.

fied by the frequency and fatality of this affection in convents, prisons, factories, barracks, cellars, menageries, and other dark and often damp places. This vicious system of seclusion from light is however, not only thus often coercive, and involuntary, but also very frequently resorted to from choice in consequence of erroneous views concerning its influence, or false notions respecting beauty of complexion and delicacy of organization. The voluntary seclusion from light is very general, as is evident from the extreme care taken to exclude it from dwellings, offices and other places of business, as well as to avoid it in the ordinary pursuits of life; and, this too in so called civilized society notwithstanding its boasted intelligence and wisdom. This evil with many others just as absurd and injurious prevail very extensively, in cities especially, and hence the greater prevalence of the tuberculous forms of disease and the increased destruction of life in such places. In this connection compare for instance, the fresh and ruddy hue, florid complexion, or swarthy appearance and vigorous condition of those who like farmers, sailors and the various races of men, are freely exposed to the sunshine, with the pale and etiolated aspect, anæmic condition, and adynamic state of those who are more or less habitually deprived of the light. To obviate and correct as far as possible therefore, those evils resulting from a deficiency of light it will be necessary to abandon the senseless and pernicious custom of excluding it from houses by means of shutters, blinds curtains, and other appliances, or of otherwise avoiding it, and to adopt instead the more rational and salutary plan of free exposure to it, to thus secure the due proportion and beneficial influence of this bountiful source of life. A due exposure to light is especially important to children, to thus insure healthy growth and development, and prevent as far as possible the inception as well as aid in the resolution of the various adynamic and atrophic affections so peculiar and destructive to the young. And besides these to thus break up in their incipency those morbid tendencies, which if allowed to develope, so often become active and destroy life at a later period of time.

It is thus seen on the one hand, that general and local atrophy and adynamia, with anæmia, scrofulosis, tuberculosis, and many other pathological states, are frequent results of an insufficiency of light; and, on the other, that its presence and influence is very powerful in preventing and removing such morbid conditions. Light therefore, exercises a very beneficial and potential influence, both hygienic and therapeutic, in averting and resolving tuberculosis as well as many other abnormal conditions; and hence those thus threatened or afflicted should be freely exposed to its salutary power. If then this plan of free exposure to solar light was more general much less disease of all kinds, and particularly of that form known as tuberculosis would prevail, and more recoveries would take place of those thus afflicted. It would moreover, not only thus prevent and remove much physical, but also much psychical disorder, as the deficiency or entire absence of light causes in addition to derangement of the organic life, irregular or defective innervation and cerebation, promotes sadness and misanthropy, encourages anxiety and fear, diminishes moral and intellectual vigor, and thereby increases the tendency to physical and moral degradation. While on the other hand, the presence of light causes physical invigoration and mental activity, and promotes cheerfulness, vivacity, and morality. It then becomes an important duty as it is a necessity of existence, for every human being to secure its due quantum of light, so as to thus not only preserve, but restore when lost, its healthy physical and mental status. In its various physical and psychical relations light is therefore especially necessary to those predisposed to or afflicted with phthisis to thus prevent or resolve this abnormal condition. Its necessity to such is in fact so obvious that it is scarcely necessary to further urge its importance. Suffice it to say then, that the proper exposure to light of tuberculous persons cannot be too strongly enforced, as it is not only an important hygienic measure, but also a powerful therapeutic agent, and an essential prerequisite to the successful treatment of phthisis.

Gelseminum Sempervirens.

By F. F. GARY, M. D.

Of Cokesbury, South Carolina.

It is the aggregation of facts and experiment, that enables the physician to arrive at the true effects and therapeutical properties of any remedial agent.

Believing it to be the duty of every one to furnish these facts, in a manner best calculated to develop a more general interchange of opinion among the profession, I cheerfully add my mite through the columns of the MEDICAL AND SURGICAL REPORTER, as a vehicle best calculated to fulfil the desired purpose.

Probably there is no agent of the materia medica of which so many conflicting opinions have been expressed, as Gelseminum. With some physicians it is a popular remedy, while others cannot be induced even to give it a trial. One of the many causes affecting the introduction of new remedies, and particularly Gelseminum, is the misapplication of the remedy, and as a matter of course no definite results are obtained, and thereby its usefulness denied.

Every part of the Gelseminum possesses active properties, but the root is that portion used as a medicine, and it is to the properties of this portion of the plant that our remarks are directed.

Various formulæ have been submitted for its preparation from time to time. We prefer the following, believing it the best.

R Rad gel. semp. $\mathfrak{z}\text{iv}$.

Aquæ,

Alcohol, $\text{aa f } \mathfrak{z}\text{viii}$.

Digest 14 days.

Of this saturated tincture, 25 to 30 drops for an adult, and 5 to 20 drops for children every hour for the first four hours, then one half for secondary doses. The action of Gelseminum upon the nervous system is marked, producing giddiness, dilated pupils, and sometimes a peculiar swimming of the head, and always a disturbed vision in large doses, such as double vision accompanied with complete relaxation of the muscular system without nausea or vomiting, diminishing rapidly the circulation. For this last property it has been highly esteemed, and the claim set up that it

is superior to veratrum viride. It is true that it acts upon the sympathetic nerve, and is a valuable arterial sedative, secondary to the veratrum viride. It cannot be relied upon for that certainty and promptness in reducing the pulse, but the Gelseminum possesses other properties that make it valuable, though its properties are not always exhibited.

I have seen cases where the Gelseminum did not produce any perceptible effect even in large doses, others again have only had the double vision. I have not observed that its narcotic properties are prominent.

I have given it in nervous diseases, inflammation of the brain, pneumonia, pleurisy, and acute rheumatism with benefit. In convulsions the effects have been very satisfactory. The thought has often occurred to me that it would be a serviceable remedy in tetanic convulsions, by administering it until complete muscular relaxation was produced. It has been claimed by some that this is a specific remedy for gonorrhœa, out of many cases treated by me with Gelseminum, not one was cured with this remedy alone. I found it valuable during the inflammatory stage of that disease as a preparatory remedy for other medicines.

There is no doubt of its value in all inflammatory diseases, where there is a full strong pulse.

It often happens that during the long continued use of veratrum viride the stomach will not retain it, or nausea is produced which is very distressing to the patient. In such cases the remedy of necessity must be discontinued or given in too small doses to produce the desired effect. In such cases a combination of gelseminum in the proportion of 15 or 20 drops with 2 or 3 drops of veratrum will relieve the difficulty, and obtain a reduction of the pulse without the nausea or vomiting.

The results obtained in the yellow fever epidemic in Charleston last summer were very satisfactory. Drs. White and Ford, with a view of testing its effects in comparison with other remedies, selected an equal number of cases for trial. The results were as follows, those treated with the old plan of calomel etc., one half recovered; of those treated with veratrum viride

one-third; all recovered that were treated with gelseminum. I write from memory, but believe the above is substantially correct.

From these experiments we are bound to believe it a valuable remedy in yellow fever.

If that terrible scourge should make its appearance again during the summer, I trust that the above experiments will be repeated and the result published, so as finally to put a stop to all controversy as regards its therapeutical properties.

Illustrations of Hospital Practice.

PENNSYLVANIA HOSPITAL.

[Reported by T. A. DEMMÉ, M. D.]

Service of Dr. Levick.

MAY 11TH.

Scurvy.—The improvement in these men has been rapid and decided.

While drawing attention to this disease, it should be remarked, that there is another disorder for which scurvy may be easily mistaken, namely, purpura. Some maintain that the two diseases are identical. There are, however, differences between them which are marked and characteristic.

In purpura, as in scurvy, we have dark red extravasations of blood beneath the cuticle, but as a general rule, though not invariably, the spots are smaller in the former than in the latter. In each disease the patient complains of pain in the joints, which, without inspection of the part, might be mistaken for that of rheumatism, and treated as such. In purpura the gums are much less affected. So far as my observations extend, I am disposed to think there is a greater tendency to the extravasation of blood into the interior organs in purpura than in scurvy. It is this which renders the disease so dangerous in its character. In an examination made by me, several years ago, of a person supposed to have died from dysentery, the whole intestinal tract was found studded with these purpurous ecchymoses. I have no doubt that cases of this kind, attended with hemorrhage from the bowels, without fever or other well marked symptoms of inflammation have been erroneously treated for dysentery.

Treatment.—The general treatment has been already given. Very little is needed in the form of drugs, if the proper dietetic treatment can be obtained. We have given these men lemonade freely, and fresh vegetables.

By way of testing its virtues, we have given one of them the solution of the persulphate of iron. This article, *Monse's salt*, as it is called, has recently

been brought into notice by M. Monse, apothecary to the Military Hospital of Bordeaux, who published in the *Journal de Pharmacie et Chimie*, p. 208, (1857,) an account of its mode of preparation, &c.

The patient who is using it is doing well, but I cannot say that I perceive any marked difference between his improvement and that of his companions. For the mouth affection these men are using a solution of acetate of lead, a wash much used in mercurial stomatitis. The objection to its use, that it blackens for a time the teeth, in consequence of the formation of a sulphuret of lead, does not apply with the same force to such cases as those before you.

Enlargement of the Spleen.—This man was exposed to the usual causes of miasmatic disease, and has had intermittent fever of the tertian type. There is remaining great enlargement of the spleen, its lower edge can be distinctly felt several inches below the ribs, and there is, as you perceive, dullness on percussion over this space. Enlargement of the spleen is a very common sequel of intermittent fever, and though not necessarily productive of any evil consequences, is sometimes associated with very serious general cachexy, such as a change in the constitution and crisis of the blood. Among the conditions of system associated with enlarged spleen, we may have also a tendency to dropsy, and to passive hemorrhages, and that condition of the blood known as *leucocythemia*, in which there is an excess of its white corpuscles. We had a woman in the hospital last summer, whose spleen had attained an enormous size, reaching into the pelvis. While in this condition she had been delivered of an infant, which lived for five weeks, it having during all this time, we were told, chills of the tertian type. Another patient with enlarged spleen was subject to attacks of hematemesis, after which the size of the spleen would be much reduced for a time. Common salt freely given will, it is said, promptly reduce an enlarged spleen. We generally direct for such patients a preparation of iron and quinine, either Vallet's mass, or the sulphate of quinia dissolved in the tincture of the chloride of iron, a very convenient mode of administration.

In the treatment of his ague, this man has taken the sulphate of quinia to the amount of 15 grains, given in pills of three grains each. A pill of three grains, if made up with the aromatic sulphuric acid, is not inconveniently large. Glycerine may be used for the same purpose.

Some years ago the sulphate of quinia was substituted for that of quinia, (I do not mean *quinoidine*, but the third alkaloid *quinidia*) and in the amount of 12 grains was found efficient. In consequence of the increasing demand for it, quinia became as high in price as quinia, and we have therefore re-

turned to the latter. Sulphate of Cinchonia may be used with the same object.

Chorea.—A boy, æt. 12, pale and thin, was admitted May 9, 1859. He was in good health until nine years old; was attending school but was not very studious. Had an attack of St. Vitus' dance at that time, which lasted a year, after which he remained well until three months ago.

Present condition.—Constant and varied movements, tossing and twisting of the arms and head; can with difficulty dress himself; speaks with difficulty; puts his tongue out with a jerk.

Upon pressing over the vertebral spinous processes, I detect a spot which is peculiarly painful. The patient, when walking, seems to drag one side of his body, which is consequently more affected by the disease than the other, an observation that has been frequently made in cases of chorea.

The heart sounds are natural. There are many who suppose that chorea is of rheumatic origin, and that we almost invariably have rheumatic endocarditis co-existing. I have seen but few cases in which cardiac inflammation and chorea were both present, though an *anemic* murmur is not uncommon. There is a peculiar affection closely allied to this disease, to which the term *salaam convulsions* has been given. It is characterized by a peculiar bowing motion of the head. We had such a case in this hospital nine or ten years ago. It was that of a little girl, in whom this bobbing motion was almost constant, accompanied with much singing, so that her fellow patients were afraid to remain with her, believing that she was a little fairy.

Chorea, though a disease of childhood, is not exclusively so. Besides occurring to them under other circumstances, it will be found attacking women during pregnancy, giving rise to much distress and anxiety. This generally yields to treatment, or if intractable for the time, passes off with the delivery of the child. The worst case of chorea in an adult which ever came under my observation was that of a young woman whose parents were first cousins, and all of whose children had some irregular action of their nervous system. I refer you to the books for a full account of the causes of this interesting disorder. This boy has not had his brain overtasked, does not appear to have been frightened in any way, but we find that, young as he is, his animal passions are strongly developed, and he has been addicted to improper habits, a prolific cause of chorea. For the purpose of diminishing these, I have ordered for him the bromide of potassium, which is supposed to possess strong antaphrodisiac properties. The dose of this for an adult is from 2 to 10 grains.

To remove any irritant from the alimentary canal which may exist there, the bowels should be moved by mild cathartics, for drastic cathartics are them-

selves irritant. A warm bath, containing sulphuret of potassium, to be used every night, and a pill of powder of iron, with gr. $\frac{1}{4}$ of extract of belladonna, constitute the treatment adopted in his case. Should these fail us, we have in strychnia and in the preparations of zinc, remedies which have been much vaunted as efficient in the treatment of chorea.

Post Mortem.—The man from whom these specimens were taken was moribund when admitted, and died an hour after entering the hospital, having been ill for about three weeks.

Brain.—There is adhesion of the membranes; opacity of the arachnoid; the vessels of the brain somewhat congested; the substance of the brain is somewhat softened, but there is no clot.

Lungs.—Appear to be full of blood; congested.

Heart.—Soft, breaking up under the finger.

Stomach.—Soft, mamillated.

Intestines.—Stained of a greenish hue; no disease of the glands of Peyer.

Liver and Spleen.—Soft.

From the general appearance of the patient during life, and the softening and passive congestion of the various organs, we presume this was a case of typhus fever.

Service of Dr. Neill.

MAY 11TH, 1859.

Pityriasis Versicolor cured by Sulphate of Potassium.—In this patient, who is about to be discharged, you will hardly recognize the nature of the disease. I have exhibited him to you before, and explained why the terms *chloasma* and *pityriasis versicolor* are used for the same disease, and the reason why the latter term was appropriate here. He wanted the brown liver-colored spots which the other name would indicate. He is now suffering only from the remains of the disease; there is no itching and no disqualification. The redness only remains, as it also remains after a burn, or in any reparation of the skin.

Results of Operations.—Tumor of the Breast: removed about two weeks ago. The wound has almost entirely united, a large portion by first intention. The tumor, as anticipated, proved to be, upon microscopic examination, an instance of the common mammary or adenoid tumor. It consists of a fibrous stroma, through which was prolonged the glandular structure of the breast.

Cancer of the Breast.—This was a tumor of stony hardness, removed upon the same day as the last. Upon microscopic examination it was rich in cells, not very large, proportionate to the nuclei.

A large portion of this wound had united by the first intention, and the remainder was granulating very kindly.

Fractures of the Forearm.—Upon different occasions fractures of various portions of the skeleton have been presented, and to-day advantage will be taken of a number of cases of fracture of the radius and ulna, which are at present in the hospital, to illustrate some of the points of interest and value connected with this injury, the most frequent fracture that the practitioner is called upon to treat.

Case 1st.—As you glance at this forearm it is at once perceived that it is curved laterally about the middle; upon slightly moving the lower portion of the arm, crepitus is decidedly felt. The limb was fractured last Monday, a heavily laden car passing over the arm. There is an angular deformity salient upon the ulnar side. In consequence of the very great swelling, the limb was not placed in a permanent dressing until to-day. There is in the present instance a fracture of both bones of the forearm.

Treatment.—after the swelling has subsided, and reduction effected by means of a proper degree of traction in the direction of the length of the limb, the fragments are to be retained in place by means of two splints, compresses, and roller, which were then applied. In all fractures of the forearm, the two splints should be a little wider than the widest portion of the arm.

When both bones are fractured, the anterior splint should reach from the elbow to the tips of the fingers, and the posterior splint should reach to the wrist; but when the radius or ulna is fractured alone, the anterior splint should reach to the metacarpophalangeal articulation. One splint is sufficient to restrain the motions of the hand; the other is only to retain the compress, and press the muscles into the interosseous space. In fractures of both bones there is greater deformity, and greater necessity for care in the treatment than in the fracture of one bone.

In the treatment of these fractures compresses play a most important part. When a single bone is broken, the elliptical interosseous space is encroached upon, and therefore compresses must be made use of to preserve this space. When both bones are broken, the indication to preserve the interosseous space is still more imperative.

The splints are held in situ by means of a roller; but remember—no roller is to be applied directly to the forearm, before applying the splints and compresses.

Case 2d.—This injury occurred a month ago. The fracture took place at the lower end of the radius—a fracture that is always accompanied by a peculiar deformity.

A fracture of the radius, anywhere at the lower end of the bone, whether taking off any part of the

articulation, or occurring immediately above the articulation, or an inch and a half above, as originally described by Colles, requires the same kind of treatment.

This is the class of fractures that is so often mistaken for dislocations at the wrist joint.

This injury of the radius is often followed by stiff fingers. There is a reason for this. This fracture involves a portion of the bone in which there are a number of grooves, through which glide the tendons of the radial extensors, and if the hand is kept continuously extended during the treatment, these tendons become bound down by organised bands of coagulable lymph. It is almost an aphorism that should be borne in mind in the attendance upon these cases, that in every fracture near a joint the treatment should be conducted with the intention of preserving the motions of the joint, rather than the mere union of the fragments.

In these fractures the crepitus is not always so obvious, nor can the interlocking of the fragments be overcome, especially at first. The indication is to preserve the fragments at rest, and this we endeavor to do in such a manner, that the manipulatory movements of the hand and fingers may not be interfered with.

For this purpose there is no apparatus better adapted than the well known splint of Dr. Bond; but these indications can be equally well fulfilled by a single splint and proper compresses.

Dislocation of the Clavicle.—Comparatively speaking this injury is not of very frequent occurrence, as the force is generally so applied that a fracture of the bone is more liable to take place.

The clavicle rides on top of the acromion, it rarely slips under. The ligaments at the acromial end are particularly strong; there is a dense capsule, with an additional strong band above and below.

A dislocation of this end of the bone does not cause much pain, and fortunately the motion of the arm is not much impaired. You observe the freedom from pain, and ability to use the limb.

Treatment.—At the best but little can be done, the bone invariably slipping out of place upon removing the dressing. In the present case a strip of plaster has been placed over the bone, and Fox's splint applied, with the idea of making the ligamentous union as short as possible.

It has been suggested by Laugier to keep the bone in place by means of a tourniquet, one end of which should be firmly fastened to the anterior portion of the chest, and the other to the back, whilst the screw should press upon a compress, placed over the acromial end of the clavicle. I have tried this plan and after keeping the bone in its place for three

weeks, upon removing the tourniquet it popped out of its place.

Some deformity must always remain, as well as a tendency to a recurrence of the injury.

Burns.—*Case 1st.*—I have not had an opportunity to present a series of burns, and on some other occasion I will call your attention to their appearances more fully; but we must take these cases as they are, else their symptoms will disappear.

This young man, of apparent health and color, has a burn upon the neck and back, an unusual position, covering perhaps 80 or 90 square inches. It presents in the middle a large, brown, dry surface; on the edges a grayish slough, and, surrounding that, redness of the skin and slight vesication. This shows a great many processes and degrees of burn; there are here the first three or four of the six degrees of burn, according to the classification of Dupuytren.

He was burned by the explosion of a camphene lamp, and obtained no immediate relief. This black material denotes death of the true skin, and the greenish-white ring is also a slough; when removed there will be found beneath it a red granulating surface. The redness around the circumference shows that nature is beginning to produce reaction. His life is hardly in danger; large superficial burns of the trunk are more dangerous. The foot may be filled with molten iron, as in one case that you have seen, without so much danger to life as a superficial but extensive burn of the trunk. The complications are often serious. The prostration is sometimes dangerous in the outset; or the stomach gives way, ulceration of the bowels occurs, or there is effusion into the peritoneum or arachnoid, with feeble pulse and clear mind.

Treatment.—For the present, a flaxseed poultice.

Case 2d.—This patient, in a state of intoxication, was burned about the face, neck, and hands, by flame.

The parts are covered by vesications, and slight superficial sloughs of the skin. The face and lips were enormously swollen. A most serious complication here is the inhalation of flame. There is soreness of the throat, difficulty of deglutition, and huskiness of the voice.

The prognosis is serious, from this complication, and from his advanced period of life, (59 years.) There may occur œdema and ulceration of the larynx.

The treatment is of a supportive kind, which it is difficult to carry out, from the condition of his throat. He takes milk punch, beef tea, and anodynes at night. Lint, wet with slippery elm mucilage, is applied to his burns. There are many other applications to burns—oil, cotton, molasses, flour—

which all act on the principle of the exclusion of air. Burns should not be undressed frequently. After sloughing, poultices are the most agreeable.

Venereal Disease—Chancre.—I have time to exhibit the phenomena merely, and to say little with reference to their explanation. The man came in yesterday, with a chancre, which he observed first eight days ago. It presents now a deep excavation of the *corona glandis*; at the bottom filled with a grey material. The chances of secondaries depend much upon the character of the chancre. We feel the edges, to determine whether it be an indurated or non-indurated chancre. Why? The chances of secondaries with the former are greater.

This is a non-indurated chancre. We will not mercurialize him. We will apply caustic, and treat it as a sloughing sore, with lint dipped in an astringent solution.

I inquire into his general health, to determine his recuperative power, and will give him no mercury till there is necessity for it. Phagedenic chancres are not liable to be followed by secondary eruptions. If he has them, we will give him iodide of potassium, if that does not answer, we will mercurialize him, and repeat the iodide of potassium. There is danger in mercurializing every patient with chancre.

Bubo.—This is suppuration of a superficial gland. The skin is of a red and blue color. It is not connected with venereal disease. He has had no running nor ulceration of the penis, and says that he never had. There is no cicatrix about the penis.

Treatment.—We will treat it as we would an adenitis resulting from a scrofulous diathesis; or an irritation in consequence of a want of cleanliness,—the acrid secretions of the preputial glands giving rise to inflammation and excoriation of the glands penis. It will be poulticed, and opened.

SATURDAY, MAY 14.

Pathological Specimen.—Dr. Neill exhibited a pathological specimen obtained from a patient, whose thigh was amputated two weeks before. She was 65 years of age, and the limb presented numerous sinuses, abscesses, and a collection of offensive pus. The form of the tibia was altered; there was swelling and thickening of its internal face—a deposit beneath the periosteum—and it was pointed out as a most interesting fact that an orifice, half an inch in diameter, existed near the head of the bone on its internal surface. Here there was pus from internal suppuration filling up the cancellated structure—an abscess in a bone. This case was illustrative of a certain disease of bone, which had not before been brought to the notice of the class.

With some reservation he would make the remark that there were as many diseases of bone as of flesh;

that it was as liable to as many pathological changes as occur in other tissues. He had before shown caries. This was internal periostitis, suppuration, or abscess.

Why does this occur? and what is its nature? The internal periosteum surrounds the marrow. It is extremely vascular, and subserves an important part in the nutrition of bone. The want of a proper balance in the elements of healthful nutrition—an excess of blood, or perverted nutrition—manifested itself by diseased action. In this instance there was an effusion of lymph beneath the internal periosteum, which was converted into pus. What was the way of escape? How should the abscess burst? In soft tissues we all knew that it was by interstitial absorption and thinning of the part nearest the surface.

The lymph effused beneath the *external* periosteum has become bone. Beneath the *internal* there has been softening, and the pus, permeating the cancellated structure, has formed the opening of the softer extremity of the bone, with reference to temporary relief; the abscess has pointed, as it were, in the interior of the limb. These abscesses occur most frequently in the apophyseal portions of the bone. There was an altered condition of the articular cartilages; an erosion, depending on the degenerated condition of the tissues.

There was some thickening of the fibula; it was studded with spiculae of bone. The patient did well apparently on the first day after the operation; on the second, the flaps began to slough, and her constitution was not sufficiently strong to rally and throw it off. She died from mortification. This was a result not uncommon with feeble constitutions in warm weather.

Dr. N. also felt bound to mention that he had lost the boy, whose operation (on the 4th inst.) was of considerable magnitude and severity, involving important structures, in a place where experience had taught him that interference was to be dreaded. It was one thing to see, and to do operations; but the recovery from them was quite another.

The effusion of lymph subsequent to the operation caused such swelling and pressure that the metallic sutures were taken out, and a poultice substituted for the wetted lint. The circulation was arrested by the compression of the vessels, and on the seventh day mortification set in. Vesications of bloody serum formed on the anterior part of the limb. Yeast poultices were applied, and mustard to the abdomen. Wine and brandy were administered, but he sank on the 8th day with prostration and a cold clammy skin.

Some favorable results of treatment were exhibited as well as the more unhappy terminations. A lacerated

wound of the scalp received about four weeks before, with fracture of the external table, and followed by delirium. Healed by granulation, and about to be discharged.

A lacerated wound of the head, bitten by a dog, with groundless apprehension on the part of the patient, of rabies in the animal, has healed kindly and is about to be discharged, cured.

*Fracture of the Neck of the Femur—Two Cases—*Admitted 10 weeks ago, within a day of each other, walked into the room on crutches. They had been out of bed but a short time; and had, one half an inch, the other, an eighth shortening. Dr. Neill remarked that this was as satisfactory as could be anticipated; that in this serious accident the result must be looked to with some anxiety. The shortening would not be perceptible in the gait after the patient had the ready use of the limb; which it would take sometime to regain. They were not generally allowed to leave the house till twelve or thirteen weeks after the injury, if it progressed favorably.

Unreduced Luxation of the Hip.—This patient was admitted into the house with wounds of the face, but his old injury was more interesting to examine and study. He had received it fifteen years ago.

The question arose—What was the nature of the injury? Fracture, or luxation? There was eversion of the foot, and shortening, very apparent by comparison of the patellae; and ascertained by measurement to be $2\frac{1}{2}$ inches. There was marked difference when the patient stood, in the level of the trochanters, compared with the anterior superior spinous processes of the ilium. The direction on the injured side was nearly horizontal, the trochanter being two inches above its natural position; on the other, much more oblique. He has had luxation backwards and upwards on the *dorsum illi*. Ineffectual efforts had been made to reduce it. The head of the femur has accommodated itself to its new position; and it is a fair case to show the utility of the limb with an unreduced luxation.

Compound Fracture of the Thigh—Railway Injury.—This man, beside some contusions, has a compound fracture of the thigh which presented a different appearance from any before shown. There was swelling and alteration of form from overlapping of the fragments. The utter helplessness of the limb was characteristic of this fracture. He cannot turn his toe in; crepitation and mobility were obvious. His bruises and general condition should be treated first. Extension and counter extension were a subsequent matter; if originally applied we should have an abscess—a dangerous complication. It was simply laid in a long fracture-box, enveloped

in a wet towel to convert it into a simple fracture. His water was drawn off when he came in; it was almost impossible that the bladder should empty itself. This was a serious case, not only with reference to shortening, but also the secondary changes which might occur.

Fracture of the Leg—Case 1st.—On other occasions I have shown you fractures of the leg; since then two other cases have come in which I will present to you to-day. The more frequently you see these injuries the more varied is the form and the more instructive to you. In this case there were vesications of bloody serum over the seat of fracture. It was swollen and moveable. The limb was enveloped in lead-water and laudanum, and the danger of its becoming a compound fracture secondarily, is diminishing. Extension can now be made without pain.

Case 2d.—This is a compound fracture the result of a railway injury. There is a bloody wound on the anterior portion of the tibia. The same treatment will be pursued; the edges of the wound will not be brought together by straps until the blood and serum have leaked out.

The limb was laid in a long fracture-box on account of the restlessness of the patient, restraining motion of the thigh as well as of the leg.

Editorial.

MEDICAL SERVICE IN THE NAVY.

The Board of Naval Medical Examiners, consisting of Surgeons W. S. W. Rushenberger, L. B. Hunter, J. D. Miller, and Passed Assistant Surgeon George H. Howell, brought its labors to a close May 23d. We are informed that Assistant Surgeons Thomas J. Turner, R. P. Daniel, William G. Hay, and Wm. T. Hood, who have been five years in the Navy, were found qualified for promotion, and will now be arranged on the list of passed assistant surgeons until vacancies occur in the grade of surgeons, to which they may be advanced seven or eight years hence. We congratulate them on their success and prospects.

The competition or *concours* for the office of assistant surgeon was among about thirty gentlemen examined. The Board was limited to

choose ten of the number. Of these, the following were selected in the order of their comparative merits: No. 1, William Bradley, of Pa.; No. 2, Edward F. Corson, of Pa.; No. 3, David Kindleberger, of Ohio; No. 4, Joseph D. Grafton, of Arkansas; No. 5, Robert L. Weber, of Pa.; No. 6, Robert J. Freeman, of Va.; No. 7, William E. Taylor, of Va.; No. 8, Bennett W. Green, of Va.; No. 9, James McMaster, of Pa., No. 10, James W. Herty, of Ga.

Five years hence, these gentlemen, if living, and still in the navy, will be again before a Naval Medical Board in competition for the post of surgeon, having a fair opportunity to change the relative positions now awarded to them. Upon the future examination depends the priority or precedence of promotion, and their rank in the grade of surgeon. He who shall be awarded the first place then, will be first promoted, and subsequently the first to receive the appointment of surgeon of the fleet. These objects ought to stimulate all to keep pace in the improvements in the profession, by devoting, regularly and systematically, a part of each day, from this time forward, to increasing their stores of practical knowledge, in order to be fully posted when the day of trial comes.

There is no doubt that among the unsuccessful there are many competent young physicians who have probably gained information important to themselves, from the trial they have made. It is understood that the Board decides only on the *comparative*, and not on the *positive* merits of the candidates examined; therefore no odium or mortification of rejection attaches to want of success in the competition, at least not more than attaches to failure in a race or an election. They can again enter into competition next year, if they shall not have passed the age of twenty-five, with the advantages of experience in the mode of the examination, and of an added year of study and preparation.

It is the opinion and hope of experienced men whose attention has been turned to the subject, that Congress will sanction a large increase in the very limited number of medical

officers in the navy, possibly to the extent of twenty surgeons, and as many assistant surgeons, so that next year will probably see forty or fifty of the competitors selected for the office of assistant surgeon. The opportunity will be a rare one, and candidates for the place should at once set about preparing themselves to enter the list of competition.

We are assured now that such is the increased demand for surgeons for sea service, that men who have been afloat from fifteen to twenty years, and who have passed three-score, reaching, in some instances, three-score and ten, are sent to sea. On the list of surgeons, which is limited by the existing law to sixty-nine, there are thirteen incapacitated by disease, leaving only fifty-six, including several very old men, to perform all the duties. And there are seven or eight of the assistant surgeons who are unable, on account of bodily afflictions, to perform any service. These circumstances, in connection with the greatly increased activity of the naval service, create an imperious necessity for the augmentation of the medical corps of the navy, in the course of a year or two at furthest.

Resignation of Dr. George B. Wood.—We understand that our announcement of the resignation of Dr. Wood of the Chair of Theory and Practice of Medicine in the University of Pennsylvania, has been misapprehended in some quarters. Dr. Wood expects to give another course of lectures on his branch at the University the coming winter, and retire from the chair at the close of that course, which will give the faculty ample time to make choice of a successor.

The Medical Society of the State of Pennsylvania.—This society held its eleventh annual session in this city during the present week. A full report of the proceedings will appear in our next number. The attendance of delegates was larger than usual, and the whole proceedings, up to the time of our going to press, have been harmonious, and the meeting altogether a profitable one.

Periscope.

FOREIGN.

From the German, by THEODORE A. DEMMÉ, M. D.

On the cause of the color of venous blood.—This unwearied physiologist has again enriched his favorite branch by some valuable observations and experiments.

The distinction between arterial and venous blood has of late attracted considerable attention, and to this subject Bernard has directed the penetrating powers of his mind.

The grand fact that he announces is, that under certain circumstances the venous blood proceeding from glands assumes the characteristic appearance of arterial blood. The first observation was accidentally made. In experimenting upon the secretion of various substances by the kidneys, it was noticed that the blood of the renal vein was of a bright arterial hue, and that this hue was the more vivid in proportion to the activity of renal secretions. More extended observations were made, and the fact demonstrated, that during the functional activity of *all* glands, the venous blood presents the usual appearances of arterial blood.

The following propositions embrace the observations and views of Bernard upon this subject:

1st. This change in the blood depends upon the action of two nerves of different origin and antagonistic action.

2d. The sub-maxillary gland of the dog is supplied by a very small branch of a nerve, which behind the lingualis separates from the 5th pair of nerves, but actually has its origin with the 7th pair, which it leaves near the chorda tympani. Upon irritating this nerve, the nervous blood of the gland becomes of a bright red; if cut, the color of the venous blood is restored, but upon irritating the peripheral extremity, it again becomes of an arterial color.

3d. The dark color of the venous blood is not the passive result of the quiescence of the above nerve, but the consequence of the activity of an antagonistic nerve, which is a branch of the sympathetic, arising from the gangl. cerv. suprem. Upon cutting this filament, the reverse phenomena occur to those which obtain when the nerve first alluded to is cut.

4th. Both of these nerves act on the capillary circulation—the former accelerates, the latter retards the movement of the blood.

5th. The former *actively dilates* the capillaries, the latter contracts these vessels. They are both motory nerves.

6th. They are antagonistic in their action, inasmuch as the change in color is more marked upon irritating one of them after the other has been divided.

7th. Upon the capillaries contracting, a more immediate contact of the blood particles and the gland elements is favored, and in consequence a more complete interchange of matter. The dilatation of the capillaries has the reverse effect.

Condensed from recent English journals, by T. A. DEMMÉ, M. D.

Simpson—Surgical Fever.—A few weeks ago a patient came under the care of Dr. Simpson, of Edinburgh, (*London Lancet*), in consequence of retention of the menstrual secretion, and its accumulation in the cavity of the uterus, the result of a complete occlusion of the vagina. The adhesions in the vaginal canal were to some extent broken through with the finger. This apparently simple procedure was followed by slight but distinct febrile symptoms. The symptoms, however, subsided after a day or two, and when they had finally and fully disappeared, the uterus was relieved of its long accumulating contents, by making a small opening into the dilated uterus, at its most dependent and most yielding point, with a tenotomy knife. The uterus was punctured through the roof of the vagina, and there escaped about twelve ounces of dark, tarry, viscid fluid.

The patient remained well for thirty-six or forty hours afterwards, but then a rigor occurred, and fever set in with all its fatal consequences. On the fifth day from the time of the operation she died. The post mortem revealed the signs of metritis and peritonitis.

This case suggests the question, what do patients die of after undergoing surgical operations, either in the course of general or obstetric surgery? They die of surgical fever, a disease consisting of co-existing acute fever and acute internal inflammations, just as puerperal patients die of puerperal fever, a similar compound disease consisting of acute fever and acute internal inflammations.

Dropsy of the Antrum.—Dr. Greene (*Lancet*) relates an interesting case of the above. There was a hard swelling in the superior maxillary of the right side, free from soreness,

but attended with a constant pain of an uneasy, gnawing character. Close to the orbit the bone was well defined and normal. On careful pressure at the lowest portion of the tumor, the attenuated parietes of the antrum were found to give way with a crackling sound. Inside the mouth the bone was largely distended, completely filling up the cavity between the alveolæ and the muscular covering.

Treatment.—The first molar tooth was extracted, and a trochar introduced through its socket into the cavity of the antrum. About an ounce of thin, yellowish fluid, of an intensely bitter, nauseous taste, was drawn off. The relief from pain was instantaneous after the operation, the swelling diminished, and the parts became soft. After a week, the parts had recovered their natural size.

Trephining the Tibia for Long-continued Pain.—At Guy's Hospital, Mr. Cock (*Ibid.*) applied a small trephine to the upper part of the right tibia of a woman, who lately entered the hospital for the purpose of having her leg amputated to relieve the intense suffering which she had endured for three years, originating in a blow on the shin. A constant, deep-seated pain was referable to a particular spot, which could be covered by the tip of the finger. There was no enlargement of the bone, nor periostitis, nor evidence of necrosis, nor pain on pressure over other parts of the tibia. The poor woman was almost worn out with suffering, and had submitted to every variety of treatment in vain. The trephine came upon the central cavity of the tibia, which contained no sequestrum nor any abscess. The bone was more compact, and seemed thicker than natural. Mr. C. has found the same treatment answer in other cases, and there is no doubt, when suppuration becomes freely established, the pain in this instance will disappear.

From the German, by L. ELSBERG, M. D. of N. York.

Bronchectasis Sacciformis.—The German Med. Journals regard as a very valuable contribution a communication to the *Osterr. Zeitschr. für prakt. Heilkunde* for 1859, No. 2, on the sack like bronchial dilatation, by Prof. Bamberger. While we gladly direct attention to the subject, we cannot say that we

¹ "A bellying or globular expansion," see Watson's Pract. p. 561; Wood's Pr. vol. ii. p. 62, &c., &c.

can find anything in Prof. B.'s observations that is not more or less known by the profession generally. As the cause of such ectasis, Bamberger regards in every case under all circumstances, an inflammatory process leading to atrophy of the bronchial wall. At first the mechanical influences are inactive, though they may afterwards increase the expansion. The tissue of the lung shows almost always the characters of emphysema and œdema. In not a single case did he ever find a trace of tubercles, and therefore agrees with Rokitsanski as to the general "Ausschliessungsfähigkeit" (*exclusionary power*) of well developed and extensive bronchiectasis against tuberculosis. Extensive and firm adhesions were found in almost every case and correspond to the frequent pleuritic phenomena; enlarged bronchial glands were also found in almost all cases.

The most important symptoms are violent attacks of coughing with expectoration of fetid purulent sputa in great masses, frequent attacks of hæmoptysis, the physical signs of formation of cavity, and the gradually progressive marasmus. As means of distinguishing the dilated from tuberculous cavities an account of the aid derived from the situation of the physical signs is repeated, namely, that "in bronchiectasis they are observed considerably oftener on the lower and posterior parts of the lung than on the upper lobes;" and as still more important Bamberger quotes the circumstance first made known by Rapp, that in bronchiectasis there occurs a much more rapid change in the physical signs than in any other form of vomica. The strength and looks of persons affected with bronchial dilatation often remain in spite of persistent cough and expectoration apparently unimpaired for many years.

Our knowledge of the treatment is not enriched by Bamberger's communication.

In addition, we feel greatly tempted to reprint for our readers some of the clear remarks of our own Prof. Wood. "Bronchial dilatation is not so much a disease in itself as an effect of disease. It is worthy of notice chiefly from the close resemblance of its signs, in some instances, to those of phthisis, and the consequent occasional difficulty of diagnosis." "It cannot be relieved by medicines. Attention must be directed to the diseases in which the dilatation originated, and by which it continues to be accompanied. Of these the most frequent is chronic catarrh or bronchitis." "The chief practical point of interest, in connection with this subject, is the importance of not aban-

doning, as incurable, cases of pectoral disease presenting most of the general characters, as well as physical signs of phthisis, unless it should have been well ascertained that they are not chronic bronchitis, with dilated tubes."

From the French, by CH. F. J. LEHLBACH, M. D., of Newark, N. J.

The Dust of Ages.—"Micrographie Atmosphérique."—Under this title the *Gazette Hebdomadaire*, April 1st, in its report of the meeting of the Académie des Sciences, mentions a paper furnished by M. Pouchet, entitled "Etude des corpuscles en suspension dans l'atmosphère." The atmosphere which surrounds us holds in suspension a mass of corpuscles, the detritus of the mineral crust of our globe, animal and vegetable particles, and the debris of all that is used for man's purposes. These diverse corpuscles are proportionably more numerous and voluminous as the atmosphere is more or less agitated by the wind, and it is to these that the term dust has been applied.

The author enumerates the various corpuscles of mineral, animal and vegetable origin with which the air is loaded. Under the latter—the vegetable products—he mentions especially particles of wheat, which are always found mixed with dust, be it recent or old, as well as those of barley, rye, potatoes, which have been discovered in rare instances.

"Astonished at the proportional abundance of flour which I have found among the atmospheric corpuscles," says M. Pouchet, "I undertook the task to examine the dust of all centuries and of all localities. I have explored the monuments of our large cities; those of the shore and those of the desert; and in midst of the immense variety of corpuscles that universally float in the air, almost always have I found the dust of grain, in greater or lesser abundance. Endowed with an extraordinary power of preservation, years seem scarcely to have altered it.

"Whatever may be the antiquity of atmospheric corpuscles, we find among them the dust of grain yet recognizable. I have discovered it in the most inaccessible retreats of our old gothic churches, mixed with their blackened dust of eight centuries; I have met it in the palaces and hypogæes of Thebes, where it dates back perhaps to the epoch of the Pharaohs. I have found it even in the interior of the tympanal cavity of the head of a mummified dog, which I have recovered from a subterranean temple of upper Egypt.

"It can be proposed as a thesis, that in all countries where wheat forms the basis of food, its debris is mixed throughout with the dust, and may be detected in it in larger or smaller quantities."

At the close of his paper, M. Pouchet enumerates, among others, the following places, the dust of which has been submitted to his critical research: The laboratory of the museum of natural history in Rouen; the tower of George of Amboise, in Rouen; the interior of the abbey of Fecamp; the ruins of Thebes; the tomb of Rameses II.; the sepulchral chamber of the great pyramid; the temple of Venus Athor & Philé; the temple of Sérapis at Ponzoles; the head of the mummified dog aforesaid; and lastly, the cabinet of an anti-quarian Jew at Cairo!

Medical News.

Portraits of "Second and Third Rate Physicians."—The Belmont Medical Journal, (5 by 7 inches,) which claims to be "an offering of the Belmont Medical Society to the Goddess Hygeia," is also making an offering to the deity of Buncombe.

It proposes to give the photographic likenesses of some of the physicians of Belmont and the adjoining counties. The object is "to hand down for the future, reminiscences of the medical faculty of 1859." It says:—We wish to bring face to face the different members, and post up, as it were, the good and the evil of each one without distortion (*of countenance?*) or flattery, thereby exhibiting, historically, a type of time, which has in nearly every instance eluded our grasp. Who would not give a handsome sum to see the physicians of a country village in the time of Hippocrates or Galen, or all the members of the healing art in a shire of England, in the days of William the Conqueror? To do justice to history, it is not enough to see Esculapius, or Sydenham, the exalted of the profession. We wish to see also the *second and third rate physicians* cotemporary with those whom the world has honored, so that an opportunity may be presented to judge how far one mind has affected another.

In the number before us, the specimen of the "Medical Faculty of 1859," is Dr. Henry West. After describing his internals, the Journal says:—"His external appearance is very *outré*—was never dressed in his life. As uncomfortable in a new coat as a pig would be

in the kingdom of heaven." He is also recommended as having no particular relish for "three mile prayers and half mile graces," and "devoted to the curtailment of the acerbities of life."

We await anxiously the appearance of the physiognomy of the next "reminiscence of the Faculty of 1859."

Density of Population in the City of New York.—At the last meeting of the Sanitary Association the following remarkable facts were adduced:

"Three years since the whole number of buildings of all descriptions in this city was some 53,000. The city is divided into twenty-two wards. In 1856, nineteen of these wards contained a population of 535,027 inhabitants, divided into 112,833 families, averaging a little less than five souls in each family. For the accommodation of these 112,833 families residing in nineteen wards, there were 36,088 dwellings averaging about *three and one half families* occupying an entire house. There are but 12,717 of these families occupying an entire house, 7,148 of these dwellings contain two families, 4,600 contain each three families. Thus, while 24,465 of these dwellings shelter but 36,213 families, the remaining 13,623 houses have to cover 76,620 families, averaging nearly *six families to each house*, showing that about three-fourths of the whole population of New York live, averaging but a fraction less than *six families in a house*, while only about *one family in ten* occupy a whole house."

No Drunkards nor Delirium Tremens in Spain.—Extract from a letter from J. O. Putnam, now in Spain, published in the *Buffalo Advertiser*:

"A few cents every where buy a bottle of wine; its use is universal; there is never a meal without it. What is the effect of this abundance and this universal use upon the habits of the people? I can only answer that I have sought the most intelligent sources of information, and have had but one reply, and that has been confirmed by my own observation, which has not been unquiescent, that drunkenness is not a vice of the country; that excessive drinking of intoxicating liquors is not its habit; that while there are exceptional cases, as a nation it is one of sobriety. It is not true that there is no drunkenness; but it is rare, not habitual, even in individuals, and is not felt as a public evil. Nor is it true that the wines drunk in great excess will not in-

toxicate. You will think my curiosity a little impertinent, but I have visited hospitals, both in Portugal and Spain, and inquired of their physicians if they ever had cases of delirium tremens—that scourge which, in our country, opens the gateway to death to so many gifted and noble natures—and their universal reply has been, that it was a disease unknown to the country. Private practitioners told me the same thing.”

“*The Kane Monument Association.*—The incorporation of the Kane Monument Association held a preliminary meeting at the rooms of the Geographical Society last evening. It is estimated that the cost of the monument will not exceed \$15,000. Three thousand dollars worth of stone has been presented by the President of the Albert Free Stone Company of Nova Scotia. It is designed to have a bronze statue of Dr. Kane, in citizen's dress, life size. On the sides of the base there will be busts of Henry Grinnell, George Peabody, and Sir John Franklin. The Committee on Art and Design are Thomas Hicks, Elliott, Kensett, and Palmer. The Association has nearly 500 members. The means for the monument are to be raised by a series of lectures on science and literature. The site has not yet been decided upon.—*N. Y. Times.*”

The *Boston Medical and Surgical Journal* copies the following advertisement from the *Concord Gazette* of Sept. 10, 1814 :

“**VACCINE MATTER.**—The subscriber having been appointed by the President of the United States agent for vaccination, hereby gives notice that genuine vaccine matter will be furnished to any physician or other citizen of the United States who may apply for it. The application must be made by post, and the requisite fee, (five dollars,) in current bank paper of any of the middle States, forwarded with it. When required, such directions, etc., how to use it, will be furnished with the matter as will enable any discreet person who can read and write to secure his own family from the smallpox with the greatest certainty, and without any trouble or danger.

“All letters on this subject to and from the undersigned, and not exceeding half an ounce in weight, are carried by the United States mail free of postage, in conformity to a late act of Congress, entitled ‘An Act to encourage vaccination.’

“**JAMES SMITH,**
“U. S. Agent for Vaccination.

At a meeting of the Board of Managers of the Hospital of the Protestant Episcopal Church of Philadelphia, held on the 28th ult., Dr. Henry Hartshorne was elected an attending physician, to fill the vacancy caused by the resignation of Dr. J. B. Biddle, who had faithfully served the institution since its foundation. The acknowledged talents and high professional position of Dr. Hartshorne will render his election a great acquisition to the medical staff, and cannot fail to advance the rising reputation of this useful charity.

Dr. George B. Winship, of Boston, Mass., is a young man 25 years old, 5 feet 7 inches high, 143 pounds heavy, capable of raising 200 pounds with either little finger, and with his hands, 926 pounds dead-weight without the aid of straps or belts of any kind—well, this young Sampson, who, in addition to the virtues just enumerated, is a graduate of Harvard College, undertook to lecture in Modern Athens, last Monday evening, on Physical Health; when, lo! he had proceeded less than five minutes when his voice grew tremulous, his frame weak, and he fell flat upon the platform, and had to be carried out. The battle is not always to the strong.

Passed Assistant Surgeon Horwitz has been ordered to the Bureau of Medicine and Surgery as Assistant Chief of that Bureau. Surgeon Delaney and Assistant Surgeon Kindleburger have been ordered to the San Jacinto.

The last words of Humboldt.—As he was dying the sun shone brilliantly into his room and his last expression, addressed to his niece, was :—“Wie herrlich diese strahlens, sie scheinen die erde zum himmel zu rufen.” (How grand these rays; they seem to beckon earth to heaven.)

MARRIAGES.

ALLEN—PHILLIPS.—In New York, June 1st, by Rev. Dr. DeWitt, Hull Allen, M. D., of Milford, Conn. to Miss Susan Phillips, of New York.

BARTLETT—SCOTT.—At Coopertown, N. Y. June 1, by Rev. S. H. Synnott, Homer L. Bartlett, M. D., of Flatbush, L. I. to Margaret Strong, daughter of Henry Scott, Esq., of the former place.

HORNER—WASHINGTON.—On Wednesday June 1, by the Rev. M. A. De Wolf Howe, C. W. Horner, M. D., of this city, to Julia Maria, daughter of Peter G. Washington, Esq., of Washington, D. C.

DEATHS.

JANNEY.—In this city on Wednesday, the 8th inst., Dr. Benjamin S. Janney, in the 70th year of his age.

ADVERTISEMENTS.

NATHAN STARKEY,

MANUFACTURER OF
MEDICINE CHESTS,
Medical Saddle Bags, Medical Pocket Cases, Portable
Desks, Plate Chests, Gun and Pistol Cases.

No. 116 South Eighth Street,

Between Chestnut and Walnut Streets,

PHILADELPHIA, PA.



MEDICAL SADDLE BAGS, made of Russet Bridle Leather,
with Pat. Leather Covers. Flat Pattern, with Pockets. Box
Pattern, with Trays to lift out.

No. 4, cont. 24 Ground Stopper Bottles,	\$10 50
Extra, with pockets,	11 50
Nos. 5 & 8, cont. 20 Ground Stopper Bottles,	9 50
Ext. No. 8, with pocket,	10 50
A. " 8, containing 24 1 oz. Fluted Vials,	8 75
No. 10, cont. 16 1 oz. Ground Stopper Bottles,	8 50
A. " 10, cont. 20 1 oz. Fluted Vials,	7 75

Pattern Drawers in Ends—Two Rows Bottles.

No. 12, cont. 28 1 oz. Ground Stopper Bottles,	\$11 50
" 7, " 24 1 oz. " " "	10 50
" 6 & 11 " 20 1 oz. " " "	9 50
Ext. " 11, " 20 1 oz. " " " with pockets,	10 25
A. " 11, " 24 1 oz. Fluted Prescription Vials,	8 75
" 13, " 16 1 oz. Ground Stopper Bottles,	8 50
A. " 13, " 20 1 oz. Fluted Prescription Vials,	7 75
" 7, cont. 24 1 oz. Gr'd Stopper Bottles, with pockets,	11 50
A. " 11, " 24 1 oz. Fluted Vials,	8 75
" 13, " 16 1 oz. Ground Stopper Bottles,	8 50
A. " 13, " 20 1 oz. Fluted Vials,	7 75

Flat Pattern, with Pockets.

No. 1, cont. 24 Ground Stopper Bottles,	\$10 00
" 2, " 20 " " "	8 50
" 3, " 16 " " "	7 50

Medicine Chests, for Physicians. Made of Russet Leather.

No. 1, containing 44 Ground Stopper Bottles, 4 pots,	\$18 00
No. 2, " 56 " " " "	19 00
No. 3, " 48 " " " "	17 50
No. 4, " 37 " " " "	13 50
No. 5, " 32 " " " "	12 50
No. 6, " 27 " " " "	10 50
No. 7, " 20 " " " "	8 50
No. 8, " 15 " " " "	6 50
No. 9, " 14 " " " "	5 00

Mahogany Medicine Chests. Wing Pattern, with brass mount-
ing, and superior finish. 118

J. H. GEMRIG,

No. 109 South Eighth Street, below Chestnut,

MANUFACTURER OF

SURGICAL AND DENTAL INSTRUMENTS,

Trusses and Apparatus for Deformities, Splints,
Syringes, &c.

Manufactures to order and keeps constantly on hand a general
assortment of

SURGICAL AND DENTAL INSTRUMENTS

of the finest quality, and most approved patterns. Gentlemen
about to commence practice would do well to call and examine
his large assortment of Instruments. 118

HOME FOR INVALIDS WITH DISEASES OF THE CHEST.

S. W. CORNER OF CHESTNUT AND PARK STREETS,

(On the route of Chestnut Street line of West Philadelphia Omnibuses
and within one square of a Passenger Railway.)

PHILADELPHIA.

This institution has been established with a view to combine
all the best hygienic and medicinal means in the treatment of
Diseases of the Chest.

Attending Physician,—GEORGE J. ZIEGLER, M.D.

Consulting Physician,—PROF. SAMUEL JACKSON, M.D.

Application for admission may be made to the Attending Phy-
sician daily, (Sundays excepted,) from 11 to 12 o'clock. Applica-
tions in writing, or letters of inquiry, may be addressed to

JAS. W. WHITE, Sec'y,

Box 1738, Philadelphia P. O.

No. 107, t. f.

D. W. KOLBE,

SURGICAL INSTRUMENT MAKER,
32 SOUTH NINTH STREET,

Two doors above Chestnut,

PHILADELPHIA.

Previous to his commencing business in this city, he was
engaged, for a considerable time, in the most celebrated work-
shops of Paris, Belgium and Germany, and does not hesitate to
say, that there is no instrument, however complicated or
minute it may be, whose construction he is unacquainted with,
or which he could not manufacture.

Deeply impressed with the responsibility attached to the
maker of Instruments employed by the Surgeon, he will furnish
no instrument without a conscientious certainty of its being as
perfect as it is possible to make it.

As he has during the last three years been present at the op-
erations performed at the Surgical Clinics of the Colleges and
Hospitals of Philadelphia, he trusts that he understands fully
the wants of the Profession in this important department. He
asks attention to his Artificial Legs, Arms, and Club-foot Appa-
ratus.

REFERENCES.

George W. Norris, M. D., Surgeon to the Pennsylvania Hos-
pital.
Henry H. Smith, M. D., Professor of Surgery, University of
Pennsylvania.
H. L. Hodge, M. D., Professor of Obstetrics, University of Penn-
sylvania.
Samuel D. Gross, M. D., Professor of Surgery, Jefferson Medical
College.
Joseph Pancoast, M. D., Professor of Anatomy, Jefferson Medical
College.
S. Littell, M. D., Surgeon Will's Hospital.
E. Hartshorne, M. D., " "
A. Howson, M. D., " "
D. Hayes Agnew, M. D., Surgeon to Philadelphia Hospital.
R. J. Lewis, M. D., " "
Isaac Hays, M. D., " "
P. B. Goddard, M. D., " "